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IMPLEMENTATION PLAN REVIEW FOR ALABAMA AS REQUIRED BY THE ENERGY SUPPLY AND ENVIRONMENTAL COORDINATION ACT

Environmental Protection Agency

Prepared for:

Argonne National Laboratory

April 1975

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16. ABSTRACT

Section IV of the Energy Supply and Environmental Coordination Act of 1974, (ESECA) requires EPA to review each State Implementation Plan (SIP) to determine if revisions can be made to control regulations for stationary fuel combustion sources without interfering with the attainment and maintenance of the national ambient air quality standards. This document, which is also required by Section IV of ESECA, is EPA's report to the State indicating where regulations might be revised

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IMPLEMENTATION PLAN REVIEW

FOR

ALABAMA

AS REQUIRED

BY

THE ENERGY SUPPLY

AND

ENVIRONMENTAL COORDINATION ACT

U. S. ENVIRONMENTAL PROTECTION AGENCY

EPA-450/3-75-043

ALABAMA

ENERGY SUPPLY AND ENVIRONMENTAL COORDINATION ACT

SECTION IV - STATE IMPLEMENTATION PLAN REVIEW

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U.S. Environmental Protection Agency
Office of Air and Waste Management
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

April 1975

IMPLEMENTATION PLAN REVIEW

FOR

ALABAMA

Required by the Energy Supply and Environmental Coordination Act

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IMPLEMENTATION PLAN REVIEW

FOR

THE STATE OF ALABAMA

REQUIRED BY THE ENERGY SUPPLY AND ENVIRONMENTAL COORDINATION ACT

1.0 EXECUTIVE SUMMARY

The enclosed report is the U. S. Environmental Protection Agency's (EPA's) response to Section IV of the Energy Supply and Environmental Coordination Act of 1974 (ESECA). Section IV requires EPA to review each State Implementation Plan (SIP) to determine if control regulations for stationary fuel combustion can be revised without interfering with the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). In addition to requiring that EPA advise the state as to whether control regulations can be revised, ESECA provides that EPA must approve or disapprove any revised regulations relating to fuel burning stationary sources within three months after they are submitted to EPA by the states. The states may, as under the Clean Air Act of 1970, initiate State Implementation Plan revisions; ESECA does not, however, require states to change any existing plan.

Congress has intended that this report provide the state with information on excessively restrictive control regulations. The intent of ESECA is that SIPs, wherever possible, be revised in the interest of conserving low-sulfur fuels or converting to coal, sources which burn oil or natural gas. EPA's objective in carrying out the SIP reviews, therefore, has been to try to determine if emissions from certain combustion sources may be increased without interfering with the attainment and maintenance of standards. If so, it may be possible through altered resource allocations to effect significant "clean fuel savings" in a manner consistent with both environmental and national energy needs.

In many respects, the ESECA SIP reviews parallel the implementation of EPA's policy on clean fuels. Under the Clean Fuels Policy, implementation plans have been reviewed with a view to saving low sulfur fuels. Where the primary sulfur dioxide air quality standards will not be exceeded, states have been encouraged to either defer attainment of secondary standards or to revise the SO_2 emission regulations. The states have also been asked to discourage large-scale shifts from coal to oil where this could be done without jeopardizing the attainment and maintenance of the NAAQS.

To date, this activity has involved only those states with the largest clean fuels savings potentials. Several of these states have revised or are currently in the process of revising their SO_2 regulations. These states are generally in the eastern half of the United States. ESECA, however, requires the analysis of potentially over-restrictive regulations in all 55 states and territories. In addition, the current reviews address the attainment and maintenance of all the National Ambient Air Quality Standards.

The adoption of emission limitations which may, in some areas of the states, be overly restrictive (or not restrictive enough) resulted largely from the use of the "example region" approach along with analyses which considered the "hot spots" of an Air Quality Control Region (AQCR) rather than the entire region. This type of approach was offered in EPA guidelines for plan development when states were preparing their original plans. Many states, through concurrence with EPA, adopted the example region approach, largely because of the short timetable dictated by the Clean Air Act. Also, in most cases, the original SIPs were designed to attain and maintain the original NAAQS, some of which have since been designated as "guides" only or actually rescinded. However, many states adopted and retained the original federal standards or, in a few cases, adopted more restrictive state standards, and these served as the basis on which their SIPs were approved. As a result, the requirements of many state plans conflict with legitimate national energy concerns, and thus a review of the State Implementation Plans is a logical follow-up to EPA's initial appraisal (1972) of the SIPs. At the time, SIPs were approved by EPA if they demonstrated the attainment of the original NAAQS or the more stringent state air quality standards. Also, at that time an acceptable method for formulating control strategies was the use of an example region for demonstrating the attainment of the standards.

The example region concept permitted a state to identify the most polluted air quality control region and adopt control regulations which would be adequate to attain the NAAQS in that region. In using an example region, it was assumed that NAAQS would be attained in the other AQCRs of the state if the control regulations were applied to similar sources. But use of an example region can result in excessive controls, especially in the utilization of clean fuels, for areas of the state where sources would not

otherwise contribute to NAAQS violations. For example, a control strategy based on a particular region or source can result in a regulation requiring one percent sulfur oil to be burned statewide, even though the use of three percent sulfur coal would be adequate to attain NAAQS in some locations.

EPA anticipates that a number of states will use the review findings to assist them in deciding whether or not to revise portions of their State Implementation Plans. However, it is most important for such states to recognize the limitations of the present review. The findings of this report are by no means conclusive and are neither intended nor adequate to be the sole basis for SIP revisions; they do, however, represent EPA's best judgment and effort in complying with the ESECA requirements. The time and resources which EPA has had to prepare the reports has not permitted the consideration of growth, economics, and control strategy tradeoffs. Also, there has been only limited dispersion modeling data available by which to address individual point source emissions. Where the modeling data for specific sources was found, however, it was used in the analysis.

The data upon which the reports' findings are based is the most currently available to the federal government. However, EPA believes that the states possess the best information for developing revised plans. The states have the most up-to-date air quality and emissions data, a better feel for growth, and the fullest understanding for the complex problems facing them in the attainment and maintenance of air quality. Therefore, those states desiring to revise a plan are encouraged to verify and, in many instances, expand the modeling and monitoring data used to support EPA's findings. States are encouraged to consider the overall impact which the potential relaxation of overly restrictive emissions regulations for combustion sources might have on their future control programs. This may include air quality maintenance, prevention of significant deterioration, increased TSP, NO_x, and HC emissions which occur in fuel switching, and other potential air pollution situations.

Although the enclosed analysis has attempted to address the attainment of all the NAAQS, most of the review has focused on total suspended particulate matter (TSP) and sulfur dioxide (SO_2) emissions. This is because stationary fuel combustion sources constitute the greatest source of SO_2 emissions and are a major source of TSP emissions.

The following are the principle findings for the State of Alabama (Air Quality Control Regions are displayed in Figure 1-1):

- The State of Alabama has adopted the Federal primary and secondary National Ambient Air Quality Standards.
- The original particulate and sulfur dioxide emission limitations were developed under the example region concept. In October of 1973 the sulfur dioxide fuel combustion regulations were revised, based upon individual analyses for each major power generating facility. EPA approved this revised regulation as a plan revision in August of 1974 for all areas of the State except for the Widows Creek Power Plant where the original emission limit remained in effect. This regulation revision allowed for considerable clean fuels savings.
- Based on reported air quality data, there appears little margin for relaxing particulate emission limiting regulations as violations of the particulate NAAQS have been reported in all regions except for the Alabama and Tombigbee Rivers Intrastate AQCR (#1). In that region, the reported air quality values are only slightly below the standards. Thus any relaxation of particulate emission limiting regulations would only tend to aggravate the existing situation.
- Based upon modeling results and reported air quality violations, no potential exists for SO_2 regulation relaxation in the Alabama portion of the Mobile-Pensacola-Panama City-Southern Mississippi Interstate AQCR (#5). Only in certain portions of the Tennessee River Valley-Cumberland Mountains Interstate AQCR (#7), do modeling results indicate a potential for SO_2 regulation regulation revision; however, in this AQCR, numerous air quality violations have been recorded. Therefore, careful consideration should be given to the impact of a SO_2 regulation revision on the regional air quality. In the Columbus-Phoenix City Interstate AQCR (#2), potential fuel savings are minimal from regulation

relaxation since no significant fuel combustion sources are located in the Alabama portion of this region. In the remaining four AQCR's, Alabama and Tombigbee Rivers (#1), East Alabama (#3), Metropolitan Birmingham (#4) and the Southeast Alabama (#6), the current sulfur contents of the fuels consumed by major sources in the region are well below the levels required by the existing regulation and therefore the necessity of a regulation relaxation does not appear to exist.

- Therefore, considering the available modeling and air quality data, there is only a limited potential for Clean Fuels Savings in the State of Alabama.

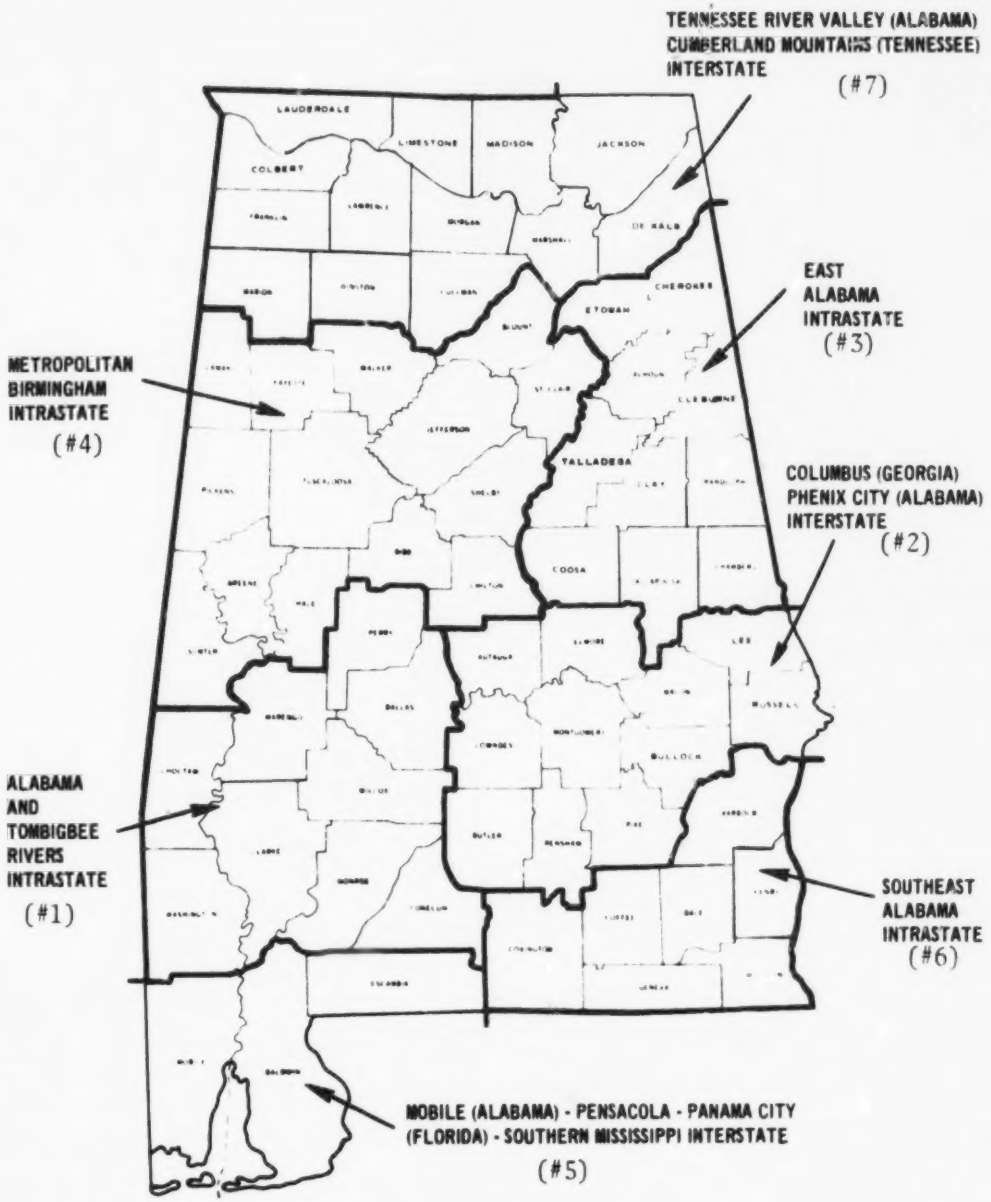

Figure 1-1. Alabama Air Quality Control Regions (AQCRs)

2.0 ALABAMA STATE IMPLEMENTATION PLAN REVIEW

2.1 SUMMARY

A revision of fuel combustion source emissions regulations will depend on many factors. For example:

- Does the state have air quality standards which are more stringent than NAAQS?
- Does the state have emission limitation regulations for control of (1) power plants, (2) industrial sources, (3) area sources?
- Did the state use an example region approach for demonstrating the attainment of NAAQS or more stringent state standards?
- Has the state initiated action to modify combustion source emission regulations for fuel savings; i.e., under the Clean Fuels Policy?
- Are there proposed Air Quality Maintenance Areas?
- Are there indications of a sufficient number of monitoring sites within a region?
- Is there an expected 1975 attainment date for NAAQS?
- Based on (1973) air quality data, are there reported violations of NAAQS?
- Based on (1973) air quality data, are there indications of a tolerance for increasing emissions?
- Are the total emissions from stationary fuel combustion sources a relatively small portion of the regional total?
- Do modeling results for specific fuel combustion sources show a potential for a regulation revision?
- Is there a significant clean fuels savings potential in the region?
- Must the regulations be revised to accomplish significant fuels switching?

This SIP review has answered these questions based on an overall evaluation of EPA's current information. Based on these answers, each AQCR has been assessed as a good, marginal, or poor candidate for regulation relaxation.

Table 2-1 summarizes the conclusions of this State Implementation Plan Review and gives the overall candidacy assessment for each AQCR.

The ratings which are shown in Table 2-1 were determined by assessing the following criteria:

Good	Poor	Marginal
1) Adequate number of air monitoring sites	1) Violation of NAAQS	1) No air quality data or insufficient number of monitoring sites
2) No NAAQS violations	2) Attainment data for NAAQS later than 1975	2) Inconsistent "indicators"
3) Attainment data of 1975 for NAAQS in the SIP	3) Proposed AQMA	
4) No proposed AQMAs	4) Model results show no potential for regulation revision	
5) Modeling results show a potential for regulation revision		

For an AQCR to be rated as a good candidate, all of the criteria listed under "Good" would have to be satisifed. The overriding factor in rating an AQCR as a poor candidate is a violation of either the primary or secondary National Ambient Air Quality Standards during 1973. However, if any of the other conditions listed under "Poor" exists, the AQCR would still receive that rating. The predominant reason for a marginal rating is a lack of sufficient air quality data. In Priority III regions, air monitoring was not required during 1973; therefore there are little if any data with which to determine the current air quality status. Marginal ratings are also given when there are varying or inconsistent "indications".

Table 2-1. STATE IMPLEMENTATION PLAN REVIEW (SUMMARY)

"INDICATORS"	STATE		ALABAMA AND TOMBIGBEE RIVERS INTRASTATE AQCR #1		COLUMBUS-PHENIX CITY INTERSTATE AQCR #2		EAST ALABAMA INTRASTATE AQCR #3		METROPOLITAN BIRMINGHAM INTRASTATE AQCR #4		MOBILE-PENSACOLA-PANAMA CITY-SOUTHERN MISSISSIPPI INTERSTATE AQCR #5		SOUTHEAST ALABAMA INTRASTATE AQCR #6		TENNESSEE RIVER VALLEY-CUMBERLAND MOUNTAINS INTERSTATE AQCR #7	
	TSP	SO_2	TSP	SO_2	TSP	SO_2	TSP	SO_2	TSP	SO_2	TSP	SO_2	TSP	SO_2	TSP	SO_2
• Does the State have air quality standards which are more stringent than NAAQS?	NO	NO														
• Does the State have emission limiting regulations for control of:																
1. Power plants	YES	YES														
2. Industrial sources	YES	YES														
3. Area sources	YES	YES														
• Did the State use an example region approach for demonstrating the attainment of NAAQS or more stringent State standards?	YES	NO														
• Has the State initiated action to modify combustion source emission regulations for fuel savings; i.e., under the Clean Fuels Policy?	NO	YES[1]														
• Are there proposed Air Quality Maintenance Areas?			NO	NO	NO	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	NO
• Are there indications of a sufficient number of monitoring sites within a region?			YES	NO	YES	YES	YES	NO	YES	YES	YES	YES	YES	NO	YES	YES
• Is there an expected 1975 attainment date for NAAQS?			2	3	YES	2	YES	3	YES	2	YES	YES	YES	3	YES	NO
• Based on reported (1973) Air Quality Data, does air quality meet NAAQS?			YES	NDA	NO	YES	NO	NDA	NO	YES	NO	NO	NO	NDA	NO	NO
• Based on reported (1973) Air Quality Data, are there indications of a tolerance for increasing emissions?			YES	N/A	NO	YES	NO	N/A	NO	YES	NO	NO	NO	N/A	NO	NO
• Are the total emissions from stationary fuel combustion sources lower than those of other sources?			YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	YES	NO	NO
• Do modeling results for specific fuel combustion sources show a potential for a regulation revision?			N/A	N/A	N/A	N/A	N/A	YES	N/A	YES	N/A	NO	N/A	N/A	N/A	YES
• Must emission regulations be revised to accomplish significant fuel switching?			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
• Based on the above indicators, what is the potential for revising fuel combustion source emission limiting regulations?			GOOD	MARGI-NAL	POOR	GOOD	POOR	MARGI-NAL	POOR	MARGI-NAL	POOR	POOR	POOR	MARGI-NAL	POOR	MARGI-NAL
• Is there a significant Clean Fuels Saving potential in the region?			N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO	N/A	NO	N/A	N/A	N/A	MARGI-NAL

Table 2-1. State Implementation Plan Review (Continued)

FOOTNOTES:

[1]The State submitted (in October 1973) and EPA approved (in August 1974) a SIP revision pursuant to the Clean Fuels Policy.

[2]Presently meeting standards.

[3]Attainment schedule indicates region is below standard; current data is unavailable.

NDA = No data available.

N/A = Not applicable

2.2 AIR QUALITY SETTING FOR THE STATE OF ALABAMA

2.2.1 Alabama Air Quality Control Regions

The State of Alabama is divided into seven Air Quality Control Regions as shown in Figure 1-1. There are three interstate and four intrastate regions. Only the Metropolitan Birmingham Intrastate AQCR (#4) has a relatively large (greater than 75 people per square mile) population density. Based on present conditions and growth projections for the state, four counties in Alabama have been proposed as Air Quality Maintenance Areas (AQMA's) for total suspended particulates (Figure 2-1). These are Etowah County in the East Alabama Intrastate AQCR (#3), Jefferson and Walker Counties in the Metropolitan Birmingham Intrastate AQCR (#4) and Mobile County in the Mobile-Pensacola-Panama City-Southern Mississippi Interstate AQCR (#5). No Alabama counties have been proposed as AQMA's for SO_2.

2.2.2 Alabama Ambient Air Quality Standards

All the federal primary and secondary National Ambient Air Quality Standards (NAAQS) for particulates, sulfur dioxide and nitrogen dioxide apply in Alabama (Table 2-2).

2.2.3 Alabama Air Quality Status

Based on data in the SAROAD data banks as of June, 1974, both the annual and 24 hour particulate secondary standards are being violated in all the Alabama AQCR's except for the Alabama and Tombigbee Rivers Intrastate AQCR (#1). Thus, with the possible exception of the Alabama and Tombigbee Rivers Intrastate AQCR (#1), the indications are that relaxation of particulate regulations would not be possible without disrupting NAAQS attainment or maintenance.

SO_2 air quality data was unavailable for the Alabama and Tombigbee Rivers Intrastate AQCR (#1), the East Alabama Intrastate AQCR (#3) and Southeast Alabama Intrastate AQCR (#6). In the AQCR's for which data was available, only the Mobile-Pensacola-Panama City-Southern Mississippi Interstate AQCR (#5) and the Tennessee River Valley-Cumberland Mountains Interstate AQCR (#7) reported any violations of the SO_2 NAAQS.

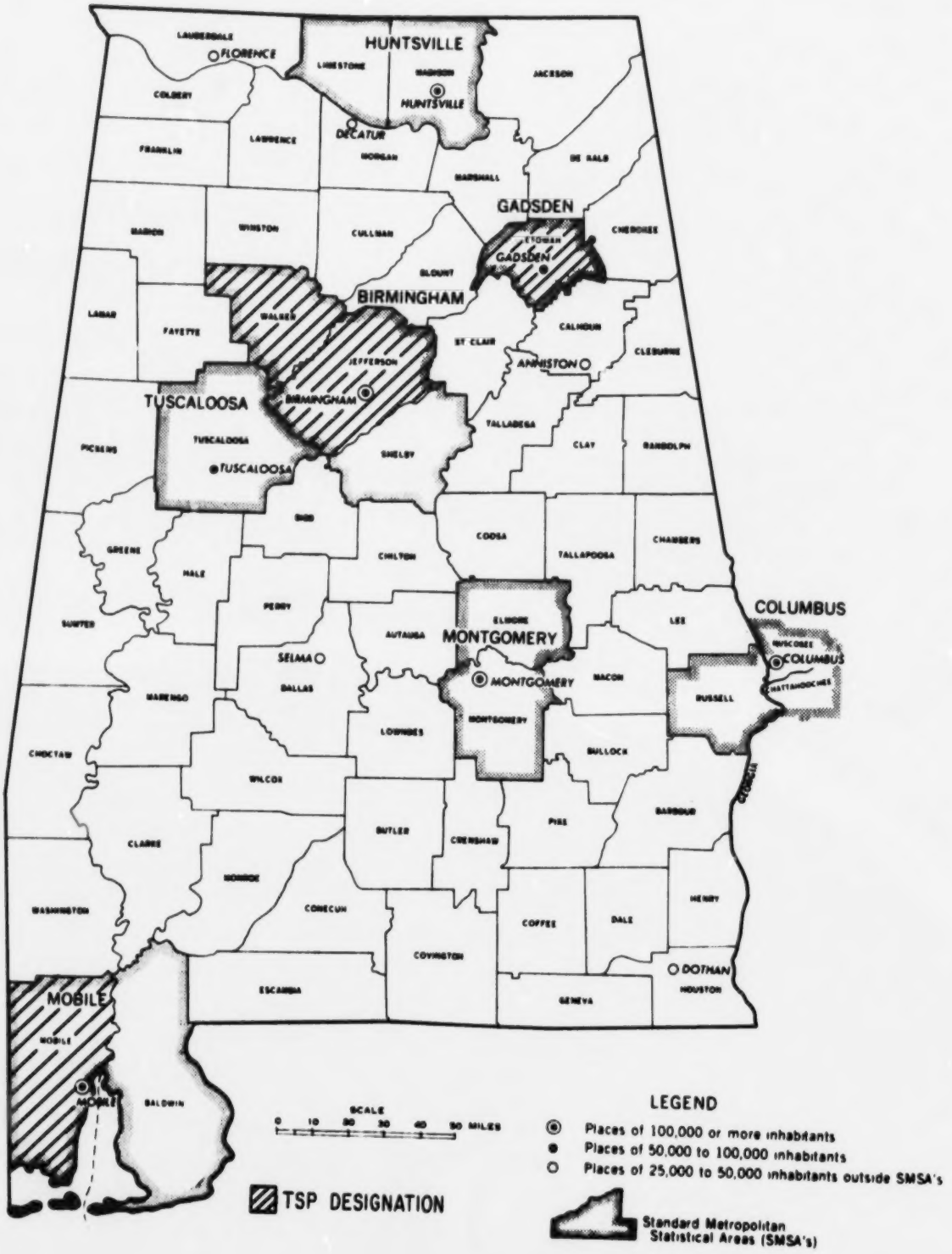

Figure 2-1. Proposed Alabama Air Quality Maintenance Areas (AQMAs)

Table 2-2. Alabama Ambient Air Quality Standards

All concentrations in $\mu gm/m^3$

		Total Suspended Particulate		Sulfur Oxides			Nitrogen Dioxide
		Annual	24-Hour	Annual	24-Hour	3-Hour	Annual
Federal and State	Primary	75(G)	260[a]	80(A)	365[a]	---	100(A)
	Secondary	60(G)	150[a]	---	---	1300[a]	100(A)

[a]Not to be exceeded more than once per year.

(A) Arithmetic mean
(G) Geometric mean

2.2.4 Alabama Emissions Summary

Alabama fuel combustion sources account for more than half of the total particulate emissions in the Alabama portion of only two AQCR's: the Mobile-Pensacola-Panama City-Southern Mississippi Interstate AQCR (#5) and the Tennessee River Valley-Cumberland Mountains Interstate AQCR (#7). In the remaining five AQCR's, the major fuel combustion particulate sources are industrial/commercial/institutional point sources in the Alabama and Tombigbee Rivers Intrastate AQCR (#1), power plants in the Metropolitan Birmingham Intrastate AQCR (#4) and area sources in the Southeast Alabama Intrastate (#6), the Columbus-Phenix City Interstate (#2) and the East Alabama Intrastate (#3).

As for SO_2 emissions, power plants alone contribute over 2/3 of the total SO_2 emissions in the Alabama portion of the Mobile-Pensacola-Panama City-Southern Mississippi Interstate AQCR (#5) and the Tennessee Valley-Cumberland Mountains Interstate AQCR (#7). In the Alabama and Tombigbee Rivers Intrastate AQCR (#1) and the East Alabama Intrastate AQCR (#3), industrial/commercial/institutional point sources are the major fuel combustion SO_2 contributors. Power plants and area source SO_2 emissions account for almost one half of the total SO_2 emissions in the Metropolitan Birmingham AQCR (#4) and the Southeast Alabama Intrastate AQCR (#6), respectively.

2.2.5 Power Plant Modeling

The limited modeling data available indicate that there is a slight potential for clean fuels savings if regulations are to be revised.

2.3 BACKGROUND ON THE DEVELOPMENT OF THE CURRENT STATE IMPLEMENTATION PLAN

2.3.1 General Information

The example region approach was used in developing the Alabama State Implementation Plan, with the Metropolitan Birmingham Intrastate AQCR (#4) being the example region for particulates. The SO_2 control strategy (revised in October of 1973) was based on an analysis of each of the major utility generating facilities in the State.

2.3.2 Particulate Control Strategy

The control strategy for particulate emissions from fuel combustion sources consists of enforcement of Chapter 4, Section 4.3 of the Alabama Air Pollution Control Rules and Regulations (see Table 2-3). To provide a basis for the degree of control to be applied, the concept of Class 1 and Class 2 counties was developed, with less stringent controls required for Class 2 counties. A Class 2 county is defined as one in which a) more than 50 percent of the county population resided in a non-urban place, as defined by the U. S. Department of Commerce Census Bureau of 1970 and b) no secondary National Ambient Air Quality Standard is exceeded based on 1971 air quality measurements. A Class 1 county is one in which either the aforementioned conditions a) or b) or both are not met.

2.3.3 Sulfur Dioxide Control Strategy

Section 5.1 of Chapter 5 of the Alabama Air Pollution Control Rules and Regulations constitute the SO_2 fuel combustion control strategy (Table 2-3). In the original SIP, the strategy was similar to the one for particulate matter - i.e., the state was divided into Class 1 and Class 2 counties, with Class 1 counties permitted up to 1.2 lb $SO_2/10^6$ Btu heat input and Class 2 counties permitted up to 1.5 lb $SO_2/10^6$ Btu heat input. However, pursuant to EPA's Clean Fuels Policy, Alabama submitted a plan revision in October 1973 changing the county classification system and the associated emission limits. The new regulations gave counties the same SO_2 priority classification (as defined in the SIP) as the AQCR in which they were located. Thus the new regulations were: a) for Priority I counties and Jefferson County, a limit of 1.8 lbs $SO_2/10^6$ Btu heat input was imposed and b) for Priority II and III counties a limit of 4.0 lbs $SO_2/10^6$ Btu heat input was imposed. In August, 1974, EPA approved the revisions, with the exception of the Widows Creek Power Plant in the Tennessee River Valley-Cumberland Mountains Interstate AQCR (#7) where a limit of 1.2 lb $SO_2/10^6$ Btu heat input was imposed.

Alabama, on March 25, 1975, again revised its SO_2 regulations, which would allow even greater flexibility in setting appropriate emission limitations.

Table 2-3. Alabama Fuel Combustion Regulations

Particulate Matter

1) Class 1 Counties: No person shall cause or permit the emission of particulate matter from fuel-burning equipment in a Class 1 County in excess of the amount shown below:

Heat Input (10^6 Btu/hr)	Allowable Emissions (lbs/10^6 Btu)
1	0.5
10	0.5
20	0.37
40	0.27
60	0.23
80	0.20
100	0.18
150	0.15
200	0.13
250	0.12
1,000,000	0.12

Interpolation for heat input values between 10 million Btu/and 250 million Btu/hr shall be accomplished by the use of the equation:

$$E = 1.38\ H^{-0.44}$$

where E = Emissions in lbs/million Btu
H = Heat input in millions of Btu/hr.

2) Class 2 Counties: No person shall cause or permit the emission of particulate matter from fuel burning equipment in a Class 2 County in excess of the amount shown below:

Heat Input (10^6 Btu/hr)	Allowable Emissions (lbs/10^6 Btu)
1	0.8
10	0.8
20	0.53
40	0.35
60	0.28
80	0.24
100	0.21
150	0.16
200	0.14
250	0.12
1,000,000	0.12

Table 2-3. Alabama Fuel Combustion Regulations (Continued)

Interpolation for heat input values between 10 million Btu/hr and 250 million Btu/hr shall be accomplished by the use of the equation:

$$E = 3.109\ H^{-0.589}$$

where E = Emissions in lbs/million Btu
H = Heat input in millions of Btu/hr

3) For purposes of this part, the total heat input from all similar fuel combustion units which discharge particulate matter through a common stack at a plant or premises shall be used for determining the maximum allowable emissions of particulate matter.

4) New fuel-burning sources emitting particulate matter shall be subject to the rules and regulations for Class 1 Counties, regardless of their location.

Sulfur Dioxide

1) Priority Classification I Regions and Jefferson County - No person shall cause or permit the operation of a fuel burning installation in a Sulfur Dioxide Priority Classification I Air Quality Control Region or in Jefferson County in such a manner that sulfur oxides, measured as sulfur dioxide, are emitted in excess of 1.8 pounds/million Btu heat input.

2) Priority Classification II and III Regions - No person shall cause or permit the operation of a fuel burning installation in a Sulfur Dioxide Priority Classification II or III Air Quality Control Region in such a manner that sulfur oxides, measured as sulfur dioxide, are emitted in excess of 4.0 pounds/million Btu heat input.

3) In addition to the requirements enumerated above, every owner or operator of a fuel burning installation having a total rated capacity greater than 1500 million Btu/hour shall:

   a) Demonstrate, to the satisfaction of the Director, that the sulfur oxides emitted, either alone or in contribution to other sources, will not interfere with attainment and maintenance of any primary or secondary ambient air quality standard.

Table 2-3. Alabama Fuel Combustion Regulations (Continued)

b) Demonstrate, to the satisfaction of the Director, that in meeting the emission limitations enumerated above, the installation will not increase emissions to the extent resulting air quality concentrations will be greater than:

(i) Those concentrations (either measured or calculated) which existed in 1970: or

(ii) Those concentrations (either measured or calculated) which existed during the first year of operation of any installation which began operation after January 1, 1970.

c) Upon the direction of the Director, install and maintain air quality sensors to monitor attainment and maintenance of ambient air quality standards in the areas influenced by the emissions from such installation. Results of such monitoring shall be provided to the Director in a manner and form as he shall direct.

4) For purposes of this regulation, the total heat input from all similar fuel combustion units at a plant, premises or installation shall be used for determining the maximum allowable emission of sulfur dioxide that passes through a stack or stacks.

5) All calculations performed pursuant to demonstrations required by 3) shall assume that the fuel burning installation is operating at or above the maximum capacity which such installation is capable of being operated.